	Application No.	Applicant(s)
Notice of Allowability	10/646,453	WELDER ET AL.
	Examiner	Art Unit	
	JAMES RUTTEN	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *1/7/2010 amendment*.

2. ☒ The allowed claim(s) is/are *1-17,27-31,33-51,53 and 54*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

        Paper No./Mail Date _____.

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date *9/1/09, 3/8/10*

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

/J. Derek Rutten/
Primary Examiner, Art Unit 2192

DETAILED ACTION

1.   This action is in response to Applicant's submission filed 1/7/2010, responding to

the 6/8/2009 Office action which detailed the rejection of claims 1-44. Claims 1-6, 10-16,

27, 30, 33, and 36-41 have been amended, claims 18-26 and 32 have been canceled, and

new claims 45-54 have been added. Claims 1-17, 27-31, and 33-54 remain pending in the

application and have been fully considered by the examiner.

Response to Arguments/Amendments

2.   Applicant's arguments, see page 14, filed 9/1/09, with respect to the rejections

under 35 U.S.C. § 103(a), have been fully considered and are persuasive. Applicant

essentially argues with respect to claim 1, that prior art of record Provencher does not

disclose the temporary unavailability of layer two functionality, since redundant

devices are available to provide continuous layer two functionality. Similar limitations

are provided in other independent claims. Therefore, the rejection of claims 1-3, 6, 8-10,

15-17, 27-29, 34-38, 41, and 43-44 has been withdrawn.

3.   As indicated below, Applicant has agreed to an examiner's amendment of the

claims. As such, the remaining arguments filed 9/1/09 are moot.

EXAMINER'S AMENDMENT

4.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted

no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone

interview with Bryan D. Kirkpatrick, Reg. No. 53,135, on April 19, 2010. During the

interview, Mr. Kirkpatrick agreed to amend claim 33 to include features similar to those

found in the other independent claims. Also, various amendments including some to

obviate issues related to 35 U.S.C. § 112 were discussed and agreed upon.

The application has been amended as follows:

CLAIMS

Please amend claims 1, 4, 5, 10, 11, 33, and 47-49 and cancel claim 52 as follows.

1.   (Currently Amended) A method of resetting an electronic device

comprising:

separating software operations associated with layer two of an International

Standardization Organization Open Systems Interconnect (ISO/OSI) reference model

from other layers in said ISO/OSI reference model, wherein said electronic device is

configured to implement said software operations, and wherein a ~~backup~~ copy of said

software operations is stored locally on said electronic device;

resetting said software operations in said layer two of said electronic device

using said ~~backup~~ copy of said software operations, wherein a layer two functionality

associated with said software operations is temporarily unavailable during said

software reset;

maintaining continuity for a communication session between said electronic

device and other electronic devices coupled together through a network during said

software reset; and

recovering execution of said layer two functionality associated with said

software operations before said continuity of said communication session is terminated.

4.   (Currently Amended) The method of Claim 1, wherein said ~~backup~~ copy

of said software operations is stored at a first memory location of said electronic device,

and wherein said method further comprises:

loading a bootstrap code to a second memory location of said electronic device,

wherein said bootstrap code is loaded in response to a request to reset said electronic

device, wherein said bootstrap code is configured to load said ~~backup~~ copy of said

software operations from said first memory location to a predetermined location of said

electronic device, and wherein said ~~backup~~ copy of said software operations replaces

said software operations previously residing at said predetermined location.

5.   (Currently Amended) The method of Claim 4, further comprising:

executing said bootstrap code by moving a program counter of said electronic

device to a first beginning instruction of said bootstrap code to overwrite said software

operations at said predetermined location with said ~~backup~~ copy of said software

operations; and

executing said ~~backup~~ copy of said software operations by moving said program

counter to a second beginning instruction of said ~~backup~~ copy of said software

operations.

10.   (Currently Amended) A method comprising:

initiating a communication between an electronic device and one or more

devices in a network, wherein a data plane and a control plane in said electronic device

are separated, wherein said data plane and said control plane are configured to control

said communication between said electronic device and said one or more devices in

said network, and wherein said data plane is associated with layer two of an

International Standardization Organization Open Systems Interconnect (ISO/OSI)

reference model;

uploading loading a bootstrap code to said electronic device, wherein said

bootstrap code is configured to load software operations for said electronic device;

loading said software operations in said data plane, wherein data plane

functionality is temporarily disabled during said loading of said software operations;

maintaining continuity in said communication at layer one of said ISO/OSI

reference model during said loading of said software operations, wherein said data

plane is separated from said layer one of said electronic device;

maintaining continuity in said communication at layers above said layer two

during said loading of said software operations; and

recovering execution of said data plane functionality before said continuity, in

said communication is terminated at said control plane.

11.   (Currently Amended) The method of Claim 10, further comprising:

pre-loading new software implementing said software operations to a first

memory location of said electronic device, wherein said bootstrap code is uploaded

loaded to a second memory location of said electronic device, and wherein said

bootstrap code loads said new software to a predetermined location storing existing

software implementing said software operations.

33.   (Currently Amended) A system for resetting an electronic device

comprising:

means for separating software operations associated with laver two of an

International Standardization Organization Open Systems Interconnect (ISO/OSI)

reference model from other layers in said ISO/OSI reference model, said electronic

device implementing said software operations;

means for resetting said software operations in said layer two of said electronic

device, wherein said laver two is temporarily disabled during said resetting of said

software operations;

means for maintaining continuity for a communication session between said

electronic device and other electronic devices coupled together through a network;

means for recovering execution of said software operations at said laver two

before said continuity of said communication session is terminated; and

means for performing a minimal reset of hardware components associated with

said layer two such that interruptions to an operating system of said electronic device

are minimized, wherein at least one of said hardware components comprises a line

card.

47.   (Currently Amended) The method of Claim 10, wherein said bootstrap

code is ~~uploaded~~ <u>loaded</u> in response to a request to reset said electronic device, and

wherein said software operations are preloaded on said electronic device prior to

receiving said request to reset said electronic device.

48.   (Currently Amended) The method of Claim 10, wherein a ~~backup~~ copy of

said software operations is stored on said electronic device, and wherein said bootstrap

code loads said ~~backup~~ copy of said software operations from a first memory location of

said electronic device to a second memory location of said electronic device.

49.   (Currently Amended) The system of Claim 27, wherein said software

operations loaded to said electronic device comprise a ~~backup~~ copy of said software

operations, and wherein said ~~backup~~ copy of said software operations reset said

electronic device.

52.   (Canceled)

REASONS FOR ALLOWANCE

5.   The following is an examiner's statement of reasons for allowance:

Applicant's arguments at the bottom of page 14 filed 1/7/2010, with respect to the

amendment to claim 1, have been found persuasive. Applicant essentially argued that

the prior art of record does not teach or suggest "wherein a layer two functionality

associated with said software operations is temporarily unavailable during said

software reset." The examiner indicated that this application would be in condition for

allowance if the independent claim 33 is amended to include features similar to those

present in claim 1 as indicated above. The above features, taken in combination with all

remaining features of the independent claim are not taught or suggested by the prior art

of record. The applicant agreed to amend the independent claim 33 as indicated by the

examiner. The remaining independent claims contain similar features which are not

taught or suggested by the prior art of record. The distinctions provided by the

independent claims apply equally to all dependent claims. Thus all pending claims 1-

17, 27-31, 33-51, 53, and 54 are allowed.

Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES RUTTEN whose telephone number is (571)272-3703. The examiner can normally be reached on M-F 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. Derek Rutten/
Primary Examiner, Art Unit 2192